

**IN THE CLAIMS:**

Please amend the claims pursuant to 37 C.F.R. § 1.121 as follows (see the accompanying "Marked-Up" version pursuant to § 1.121).

Please replace claims 3 and 4 with the following amended claims 3 and 4.

3. (Twice Amended) A method for producing a bearing structure, comprising:
- carbonitriding a surface of a bearing part to form a layer containing 30% to 80% retained austenite for contacting a surface carburizing layer used as a rolling raceway surface of the roller of the cylindrical bearing;
- forming one of a cylindrical roller bearing and a needle roller bearing;
- carbonitridizing a surface of said bearing to produce an amount of retained austenite in a surface layer that is increased by about 30%;
- subjecting said roller to a surface finishing which produces micro concave-convex portions in a random direction; and
- forming the bearing part wherein an L10 life ratio of said bearing part, when tested using standard lubricant, is greater than or equal to three times an L10 life ratio of the conventional bearing part.
4. (Amended) A method for forming a rolling raceway surface for a cylindrical bearing comprising:

carburizing a surface of said rolling raceway surface to produce a carburized layer;

carbonitriding a surface layer of said carburized layer; [and]

the step of carbonitriding including forming a surface layer containing from 30% to 80% retained austenite in said rolling raceway surface; and

forming said rolling raceway wherein an L10 life ratio of said rolling raceway, when tested using standard lubricant, is greater than or equal to three times an L10 life ratio of the conventional rolling raceway.